



WaterTalk

Alaska Idaho Oregon Washington

U.S. Environmental Protection Agency, Region 10 Bulletin - EPA 910/9-92-043

April 2005

Celebrate American Wetlands Month in May

During May, the nation will celebrate American Wetlands Month, focusing on the many benefits wetlands provide. Also known as marshes, swamps and bogs, wetlands are important for flood control, acting as buffers to absorb and reduce damage caused by flood waters. Wetlands also help to remove pollutants from water, cleaning streams and lakes, thereby reducing the cost of drinking water treatment. Wetlands are important to the commercial fishing industry and provide a boost to recreation industry activities, such as fishing, birding, canoeing and hunting. While more than half of the nation's original wetlands have been lost or converted to other uses in the lower 48 states, EPA's goal is to increase the quantity and quality of wetlands nationwide.

For activities in your state, go to www.iwla.org/sos/aswm/.

More information about wetlands is also available on the Internet at www.epa.gov/owow/wetlands.

This issue of WaterTalk offers much about wetlands and related topics. To learn about wetlands mitigation banking, see page 7. To gain inspiration for building a backyard rain garden, see page 10. To get updated on invasive species, check out page 9.



In This Issue...



EPA News to update you on agency activities, pages 1-3.



Spotlight to showcase success stories and environmental stars, pages 4 & 5.



Tools to clue you in on resources, publications, opportunities, and services, page 6.



WaterWords to share stories from communities around the Greater Northwest, pages 7 & 8.



Ecosystem to provide news that goes beyond water topics, pages 9 & 10.



Stronger Protection from Lead in Drinking Water

EPA is initiating the **Drinking Water Lead Reduction Plan**. This plan will strengthen, update, and clarify existing requirements water utilities and states must meet to test for and reduce lead in drinking water. This action will improve monitoring and treatment, and also address lead in tap water in schools and childcare facilities.

Lead is a toxic metal that was used for many years in products found in and around homes. Even at low levels, lead may cause a range of health effects, including behavioral problems and learning disabilities. Children six years old and under are most at risk because this is when the brain is developing. The primary source of lead exposure for most children is lead-based paint in older homes. Lead in drinking water adds to that exposure.

Drinking water does not start out containing lead. Lead is picked up as water passes through pipes and household plumbing fittings and fixtures that contain lead. Water leaches lead from these sources and becomes contaminated.

More information on the National Review of the Lead and Copper Rule Implementation and Drinking Water Lead Reduction Plan is available online at: www.epa.gov/safewater/lcrmr/lead_review.html. Information about lead in drinking water is posted online at: www.epa.gov/safewater/lead or by calling the Safe Drinking Water Hotline at 1-800-426-4791. Information about lead around the home can be found at: www.epa.gov/lead or from EPA's National Lead Information Center at 1-800-424-LEAD (5323).

Targeted Watersheds Grants Program Can Support Local Projects

Governors and tribal leaders are invited to submit nominations for the third year of **Targeted Watersheds Grants**. Formerly called the Watershed Initiative Program, the Targeted Watersheds Grant Program is a part of EPA's watershed approach to clean water. The program provides assistance to state and local community groups to protect inland and coastal watersheds. This year Congress has provided about \$10 million in grants for national competition. These grants are aimed at supporting community-based activities to protect and restore local water resources. These grants will be used to support innovative market-based approaches to watershed projects, such as water quality trading.

In its first two years, the Agency selected 34 watershed organizations to receive grants averaging \$700,000. The selected organizations were those with work plans that were most ready-to-go and were likely to achieve environmental results quickly. **Nominations are due May 19.** Grantees will be announced this summer. More information

is available at www.epa.gov/owow/watershed/initiative/, or by contacting Bevin Reid, EPA, 206-553-1566 or 1-800-424-4372 or reid.bevin@epa.gov. Or, contact someone listed below for state-specific information. Tribes will run their own processes for selecting nominations.

Targeted Watersheds Grants Contacts

Oregon:

Ken Bierly, 503-986-0182,
ken.bierly@state.or.us

Idaho:

Phillip J. Bandy, 208-373-0439,
pbandy@deq.idaho.gov

Washington:

Gale Blomstrom, 360-407-0271,
gblo461@ecy.wa.gov

Alaska:

Fran Roche, 907-465-5320,
fran_roche@dec.state.ak.us



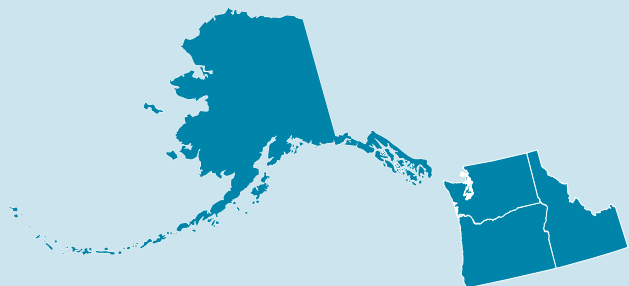
April 22 Marks Earth Day's 35th Anniversary

Millions of people around the world will celebrate **Earth Day** this April 22. This year marks the 35th anniversary of Earth Day, which began in 1970. The 2005 theme is ***"Protect Our Children and Our Future."*** Governments, corporations, faith-based groups, and citizens of the world community are invited to create and participate in activities. Many events are already planned throughout Region 10. Call the 1-800 number in this article to find one in your area.

EPA Region 10 encourages you to celebrate Earth Day April 22 and all year by making wise choices in purchasing, cleaning up the environment, and sharing the knowledge of earth-friendly living. You can join this effort to make a difference for the earth. For more information on what you can do, or to order color books, posters and other event items, call **1-800-424-4EPA**.

To register an event, to find an event, or simply to learn more, visit www.earthday.net. Many resources can also be found at EPA's web site, www.epa.gov/earthday/.

**EPA Region 10
covers the states of Alaska, Idaho,
Oregon, and Washington.**



Native Plant Appreciation Week: May 1-7



May 1-7 is **Native Plant Appreciation Week!** This week celebrates Washington's more than 3,000 native plant species, ranging from desert plants to rain forest species, and the ecosystems that are so important to sustaining Washington's environment. Native plant ecosystems play a critical role in providing suitable habitat for birds, fish, and other animals, and protecting water quality. At the same time, invasive exotic pests – insects, plant diseases, and some plant species – present a serious threat to our native plants and ecosystems. (See invasive species article on page 9).

Native Plant Appreciation Week is intended to encourage citizens to learn more about native plant species and their habitats and how they can protect them. It is an opportunity to consider taking a plant walk, visiting natural areas, or getting involved in habitat restoration projects.

This week is also a chance for governmental agencies, non-profit groups, and environmental organizations to highlight their efforts to protect native plant species and restore native plant habitats. To learn more about how you or your organization can participate, visit the website at www.wnps.org.

Celebrate Environmental Education Week, April 10-16

Join in a week of educational preparation for Earth Day

National Environmental Education Week 2005, set for April 10-16, will be the single largest organized environmental education event in U.S. history. It will involve hundreds of thousands of teachers and nature educators and millions of students. More than 50,000 schools and over 400 universities will participate. It serves as an inspiring and disciplined, week-long educational prelude to Earth Day 2005 on April 22.



The week is coordinated by the National Environmental Education & Training Foundation and its many partners. The goal is to enhance the educational impact of Earth Day through a full week of educational preparation in K-12 classrooms, university campuses, and informal settings such as nature centers, zoos, aquariums, and museums.

Educators and organizations are invited to join the effort. Educators can participate by conducting environmental classes, discussions, community-service projects, field trips, and so on. For free curricula and ideas see www.eeweeek.org/eeweeeklinks.html. If your organization would like to become a partner, or to learn more, go to www.EEWeek.org.

The Weather Channel has signed up to be a partner through "Cable in the Classroom," which is the education arm of the cable media network, and through their website. During National EE Week, they will also air *"After the Storm,"* a half-hour feature on protecting our nation's water resources and will provide a companion teacher's guide. Learn more at www.weatherclassroom.com.

EPA Region 10 offers lots of useful resources to help you participate in EE Week. Visit our environmental education website at <http://yosemite.epa.gov/r10/homepage.nsf/webpage/education+resources>. Or, call our Public Environmental Resource Center at 206-553-1200 or 1-800-424-4372.

EPA Awards Hewlett Packard for Environmental Excellence

EPA Region 10 has recognized Hewlett Packard's Corvallis, Oregon site with the prestigious Evergreen Award. This EPA award recognizes outstanding environmental excellence and leadership in pollution prevention within all sectors of the greater Pacific Northwest business community.



"I am pleased to recognize HP for taking the initiative to adopt a variety of environmentally friendly practices," said Acting EPA Regional Administrator Ron Kreizenbeck.

The HP Corvallis site has reduced greenhouse gas and toxic chemical emissions by half over the past several years, through a number of environmental initiatives. They support commuting alternatives by providing transit passes, promoting car and van pooling, and providing facilities that support walking and bicycling. HP's wastewater process includes two closed-loop reprocessors to distill and purify more than 90 percent of the spent sulfuric acid from fabrication activities. The reprocessors allowed HP Corvallis to reduce sulfuric acid purchases by more than 55 percent and greatly reduced the need for purchase of wastewater treatment chemicals.

In 2004, the site's recycling program diverted 87% of solid waste from landfills. That is almost twice the state average. The site recycles used packaging, paper, plastic, and glass from production operations, and recycles used computer equipment through the HP product take-back operation.

For more information about the Evergreen Award Program, contact Bob Drake, EPA, at 206-553-4803, 1-800-424-4372, or drake.robert@epa.gov.

A Film to See:

Teachings of the Tree People

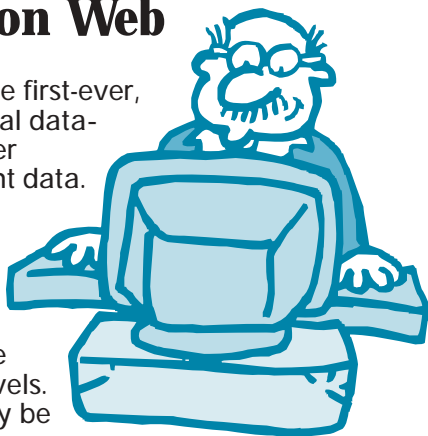
A special video is now available for short-term loan from EPA Region 10. The film is called **Teachings of the Tree People**. This documentary presents the oral traditions and environmental ethics of the Puget Sound Coast Salish People. Produced by the environmental education center Islandwood, the



documentary reveals the teachings and ongoing practices of harvesting cedar and other culturally important plants. Through the course of the film, we learn about a Tribal Elder and cultural leader of the Skokomish Tribe, Bruce "subiyay" Miller, as he passes on tradition; messages of native culture, diversity, and our natural world; and lessons of cultural and environmental sustainability. This work is currently being featured at the Seattle Art Museum. To borrow the video, call EPA's **Public Environmental Resource Center** at 206-553-1200 or 1-800-424-4372. The film also can be purchased through IslandWood at info@islandwood.org or call 206-855-4300.

Water Quality Assessment Database on Web

EPA now offers the first-ever, interactive national database of state water quality assessment data. This Web page provides the public with easy Internet access to water quality information at the state and local levels. The database may be viewed at www.epa.gov/305b/2002report.



New Electronic Permit Applications for Stormwater

A new electronic permit application system is available for dischargers who need to comply with EPA's stormwater permit for industrial facilities. Facilities requiring coverage under EPA's "Multi-Sector General Permit" can now fill out and electronically sign their applications using this system. For more information, visit www.epa.gov/npdes/enoi. EPA posts all industrial and construction stormwater applications on its website at www.epa.gov/npdes/noisearch.

Stormwater Case Studies Help Municipalities



About 5,000 municipalities are working to build programs to prevent and control stormwater pollution. To help them, EPA has developed 17 case studies. These studies highlight successful municipal approaches to the measures that are outlined in national regulations. Most of the cases are drawn from local governments that carried out the requirements in the 1990s. The stormwater case studies can be viewed at www.epa.gov/npdes/stormwater/casestudies.

New Online Training: Growth and Water Resources

An online, distance-learning training module called **Growth and Water Resources** is now posted on EPA's Watershed Academy Web at: www.epa.gov/watertrain/smartgrowth/. This training module explains how changes in land use affect water resources. It presents national data on trends in development patterns and activities on land that present challenges for meeting water quality standards. The module describes a combination of approaches to accommodate future growth. These approaches can be used in a way that benefits the economy and the environment and helps meet water resource goals. The module also includes a "tools" section with links to online resources.

May is National Wetlands Month

Wetlands:

Mitigation Banking Gets Moving in Washington

Washington is wet: you don't have to look far to find a wetland. And many wetlands are protected by regulation. But Washington is growing too, and when someone wants to develop their land and applies for a permit, often there is a conflict. Regulations require that wetlands be avoided where possible. If this is not possible, then the impacts must be minimized as much as possible. Any remaining impact must be mitigated. Mitigation generally involves restoring land that was previously wetland, enhancing the function and quality of existing wetlands, or creating new wetland area.

But often there are problems with mitigation. Some small sites have no way to be mitigated, or contain no area with good mitigation potential. Sometimes mitigation is not done. Many times it is of poor quality or fails altogether. Mitigation is often done

after the impact, and some wetland types take a long time (often decades) to develop before they are able to replace the lost functions.

Mitigation Banks create a win-win situation for both the regulator and the property owner. They establish a three-way, long-term contract between the property owner, the regulatory agencies, and a third party (the mitigation banker). This allows the property owner to satisfy the agencies' mitigation requirements by purchasing shares in bank property owned and developed by the banker. The number of shares purchased depends on the impact of the applicant's project, and the cost depends on the banker.

The mitigation bank is a property on which the banker has reestablished, created and enhanced

Continued on page 8



Continued from page 7

Mitigation Banking

wetlands. Often it is several hundred acres in size, so one large project can mitigate for many smaller projects. The banker may remove drainage ditches or farm drain tiles to increase hydrology, grade side channels or depressions to increase habitat, re-plant native wetland vegetation, and establish wildlife habitat. This will increase "ecological lift" or function, on the site, that translates into "credits" he can sell to the applicants.

The banker and regulatory agencies generate a legal document ("bank instrument") that sets the number of credits for sale (based on increase in the bank's ecological value), describes the bank operating procedures, and establishes a system of debits (based on possible applicant impacts). It also establishes procedures for credit release and withdrawal, contains plans for construction and planting, implementation, operation and maintenance, a set of performance standards the bank must meet, and monitoring and contingency plans. Finally, it contains financial assurance mechanisms to ensure that the bank is constructed and maintained, and a dead easement to a land trust or other entity, that provides a perpetual protective mechanism for the bank.

Mitigation banks have many advantages. They allow advanced wetland replacement because they are constructed several years before the applicants'

projects cause impacts, and they must prove successful before the banker is allowed to sell credits. Banks are managed by private individuals or public agencies, and they have vested interests in the bank's success. A bank allows consolidation of many small mitigation projects into a larger site. A larger site is generally of greater ecological value than many small isolated mitigation sites, and it may create new habitats that are more needed than the area that was impacted. And, importantly, a bank protects the site in perpetuity. Once established, a bank also streamlines the mitigation and permit process for permit applicants.

Development of banks is overseen by a group of federal and state agencies. This group is called the Mitigation Bank Review Team, or MBRT. The core team members are the Corps of Engineers, Washington Department of Ecology, EPA, and Washington Department of Natural Resources. Although a 2001 draft state mitigation bank rule (WAC 173-700) was never finalized, banking in Washington has recently exploded. Currently 17 banks, ranging from 20 to over 800 acres in size, are in various stages of proposal and development.

This year, the WA Legislature approved funding to conduct a pilot project to test application of the draft rule. Several banks were selected to begin the process, as if the rule were already final. After pilot completion, the draft law will be revised, and voted on. For more information on banking in Washington, visit the Ecology website at www.wa.ecy.gov.



Invasive Species: The Work Continues

Since May 2004, WaterTalk has been featuring the topic of **invasive species**—harmful plants or animals that are not native to the ecosystem, and which cause economic harm or harm to human health or the environment. Invasive species have been called one of the main environmental threats of the 21st century. This edition highlights some of the many, many activities underway to tackle this tough issue. For details, contact Joan Cabreza, EPA, at 206-553-7369 or 1-800-424-4372, or cabreza.joan@epa.gov.

WA Invasive Species Council Bill

Senate Bill 5385, which would create a Washington Invasive Species council, was introduced in January. The council would be a joint effort between local, tribal, state, and federal governments, as well as the private sector and non-governmental organizations. The purpose is to foster cooperation, communication, and coordinated approaches for the control of invasive species. The council would not usurp the individual mission of its member organizations, duplicate effort, or change existing statutory authorities of state agencies.

Invasive Weed Certification Program

The Eastern Oregon Agricultural Research Center has a new Invasive Weed Certification program. The objective is to stimulate the development of local working groups throughout the five-state region. It is designed as a "train-the-trainer" program, to help people organize and facilitate working groups in their communities with a focus on ecologically-based invasive plant management. For information contact Roger Sheley at 541-573-8938 or roger.sheley@oregonstate.edu.

New King County Brochure on Invasive Weeds

King County Noxious Weeds is offering a new, colorful brochure for groups doing outreach on invasives in King County. It is called "Neighborhood Bullies: Invasive Weeds in Urban Lands." The brochure explains how weeds spread and damage natural areas and what we can do about that. It also features 14 noxious weeds and invasives found in urban King County. For each weed, there is a description and photo. To request copies to distribute, contact Sasha Shaw in King County at 206-263-6468. The King County and Washington State weed lists can be found at <http://dnr.metrokc.gov/Weeds/laws.htm>.

Strange Days on Planet Earth

This National Geographic program will air April 20 and 27 (check local listings) on PBS. Focusing on hot issues facing our environment, this winner of the 2004 film festival Panda Award for Best Series and other awards presents a high-tech detective story. The program takes a look at the cause and effect relationship between what we as humans do to the Earth and what that in turn does to our environment and ecosystems. The first of four episodes, "Invaders Alien," is about plants and animals with enormous powers, which have invaded every continent. To learn more, visit the Web at www.pbs.org/strangedays.

New Internet Sales Tracking Tool

USDA has noted a link between growing Internet sales and the spread of invasive plants. Next-day courier services make it possible to ship organisms coast-to-coast or even from abroad with little scrutiny. APHIS has created a system to identify and track web pages and Internet operators selling outlawed plants. The high-tech enforcement tool, called the Agricultural Internet Monitoring System, was unveiled in January. U.S. sellers of regulated plants are now beginning to get APHIS e-mail notices warning them a federal permit is needed to sell such plants.

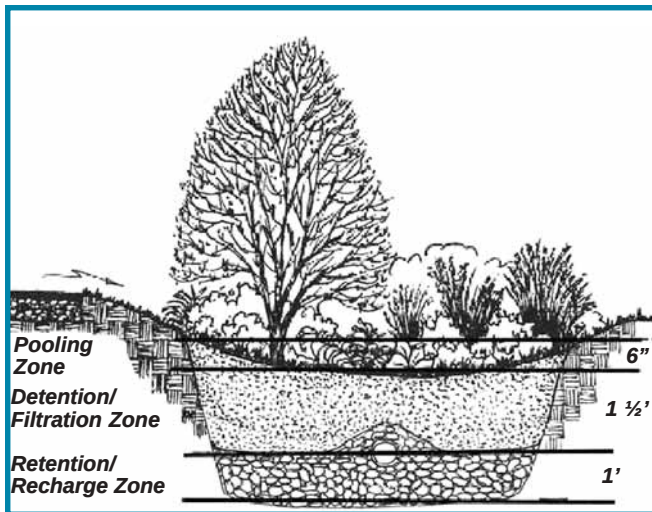


Beneficial Landscaping

Rain Gardens – An Idea Whose Time is Now

Gardeners, this is the spring project for you! As the Pacific Northwest heads into a serious drought, we urge you to consider installing a rain garden. So what is a rain garden and why should you create one?

A **rain garden** is a garden designed to soak up rain and runoff from your roof, driveway, and lawn. It is a shallow depression or excavation (not a wet-land), generally 4" to 8" deep, that is planted with wildflowers and other native vegetation rather than lawn. A rain garden, which absorbs about 30% more water than conventional lawn, is one of many tools or strategies used nowadays to lessen the amount of stormwater runoff from our communities. Such tools are referred to collectively as "low impact development" methods, and include other techniques, such as pervious pavements, vegetated rooftops, and curbsless, narrowed streets.



We know that during wet periods, excessive stormwater runoff erodes and degrades stream channels, and salmon eggs and juveniles may be swept away. Flooding and drainage problems occur, and our municipal stormwater systems may become overloaded, resulting in release of untreated sewage and other pollutants.

But why are we concerned about stormwater during a drought? In our April 2003 WaterTalk article, we talked about pre-spawn salmon mortality, which occurs in our urban streams when toxic stormwater runoff full of oil, grease, anti-freeze, pesticides, and other pollutants, kills salmon returning to spawn before they are able to do so. These pre-spawn fish kills occur following periods of drought when the toxins have built up on roadways and landscapes treated with chemicals.

The first flush of these pollutants with the autumn rains carry the highest concentration of toxins. Rain gardens would capture a portion of this runoff, infiltrate it and help to remove toxins.

In addition, rain gardens provide a way in which residents can personally contribute to cleaner water, healthier fish and wildlife populations, and a more beautiful and functional environment. Though each rain garden seems small, collectively they would help to restore a portion of the land's ability to hold or retain water to perform ecological services. For example, freshwater would be captured and infiltrated to recharge groundwater/drinking water supplies, to sustain vegetation and wildlife, and to provide adequate flows in streams during dry spells, which sustains fish and other aquatic life.

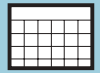
Rain gardens are a simple and attractive way to absorb stormwater, while providing habitat for birds, butterflies, and dragonflies, and enhancing the beauty of our homes, neighborhoods, and communities. Our Washington State University Cooperative Extension liaison, Sharon Collman, can provide instructions for how to construct rain gardens. Contact her at **206/553-0038**, collman.sharon@epa.gov. For more information about this and other aspects of beneficial landscaping, contact Elaine Somers at **206-553-2966**, **1-800-424-4372**, somers.elaine@epa.gov, or visit our Beneficial Landscaping website at www.epa.gov/r10earth/bl.htm.

Call for Papers:

Groundwater Under The Pacific Northwest: Integrating Research, Policy, & Education, November 2-3, 2005, Dolce Skamania Lodge, Washington. WA Water Research Center, www.swwrc.wsu.edu/conference2005/, watercenter@wsu.edu, 509-335-5531.



CALENDAR



April

April 10-16

National Environmental Education Week,
www.eeweek.org.

April 15-17

National Youth Service Day,
www.ysa.org/nysd/.

April 19-20

Science and the Northwest Forest Plan
Conference, Portland, OR. Oregon State
University, 541-737-2329.

April 19-20

Troubled Water: Exploring Solutions for
the Western Water Crisis, Boise, ID. Boise
State University, 208-426-4218.

April 21-22

Land Use Conference, Seattle, WA. Law
Seminars International, 800-854-8009,
www.lawseminars.com/seminars/05LUWA.php.

April 22

Earth Day, www.earthday.net.

April 20-22

Animal Feeding Operations and Water
Quality: Resources and Livestock in
Balance, Leavenworth, WA. Tipton D.
Hudson, WSU Extension, 509-962-7507,
hudsont@wsu.edu.

April 22-24

Northwest Sustainability Conference,
Seattle, WA. Rachel Smith, 206-762-1976,
www.nweec.org/schedule_sust-400a_04-05.htm.

April 23

Earth Day Fair, Coeur d'Alene, ID. Earth
Day Coeur d'Alene, 208-667-4595.

April 26-28

Alaska Water Wastewater Management
Association Training Conference, Juneau,
AK. http://awwma.org/ConferenceInfo/Conference_Info.htm, 907-561-9777.

May

American Wetlands Month,
www.iwla.org/SOS/awm/.

May 1-7

Native Plant Appreciation Week,
Washington, www.wnps.org.

May 15-19

World Water & Environmental Resources
Congress 2005, Anchorage, AK.
www.asce.org/conferences/ewri2005/,
e-mail conferences@asce.org.

May 17

Deadline for contributions to the July issue
of WaterTalk. Andrea Lindsay, Editor,
206-553-1896, 1-800-424-4372,
lindsay.andrea@epa.gov.

May 19-21

Earth Rites: Imagination and Practice in
Sci-Arts Eco-Cultures, Bothell, WA. Art
Culture and Nature Organization,
e-mail KKochhar@uwb.edu.

May 24

Sustainable Building and Design Fair,
Anchorage, AK,
greenstarinc.org/events.php.

June

June 1-2

Northwest Pollution Prevention
Roundtable, Victoria, BC, Canada,
pprc.org/networking/rrt.cfm.

June 21

ASLE 2005: Being in the World, Living with
the Land, Eugene, OR.
www.asle.umn.edu,
e-mail allisonw@uca.edu.

Years 2005-2015

The United Nations has declared the years
2005 to 2015 International Decade for
Action: Water for Life, www.unesco.org/water/water_celebrations/decades/index.shtml.



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April 2005



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Alaska Idaho Oregon Washington

WaterTalk is published quarterly by the U.S. Environmental Protection Agency, Region 10. *WaterTalk* seeks to be a useful tool for those who protect water resources and ecosystems in communities of the Greater Pacific Northwest, by providing practical resources and relevant agency news.

You are invited to contribute items for publication. Submittal deadline is the 15th day of the month before publication. *WaterTalk* articles can be used in other publications. Please give credit to *WaterTalk*.

For mailing list changes, or to contact the editor, call Andrea Lindsay at (206) 553-1896 or 1-800-424-4EPA x1896, or e-mail lindsay.andrea@epa.gov.

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